

SENYAVIN, M.M.; TIKHONOVA, L.I.

Comparative evaluation of the stability of complex compounds by
means of ion-exchange chromatography. Zhur.neorg.khim. 7 no.5:
1095-1100 My '62. (MIRA 15:7)
(Complex compounds) (Chromatographic analysis)

SMOLIN, D.D.; TIKHONOVA, L.I.; RYTOVA, A.A.

Synthesis of some 7-substituted 8-hydroxyquinoline-5-sulfonic acids and a physicochemical evaluation of their properties in forming complexes with Sr^{2+} and Ca^{2+} ions. Zhur.ob.khim. 32 (MIRA 15:9)
no.8:2418-2423 Ag '62.
(Quinolinesulfonic acid) (Complex compounds)

L 34502-65 ENT(m)/EWP(s)/T/EWP(t)/EWP(b) Po-4 LSP(c) JD/CG/EM
ACCESSION NR: AP5002801 S/0078/CS/010/001/0132/0139

AUTHOR: Tikhonova, L. I.

TITLE: Dissociation constants of di-N-carboxymethylethylenediamine-bis-methylphosphonic acid and the instability constants of its chelates with certain alkaline earth and rare earth elements

SOURCE: Zhurnal neorganicheskoy khimii, v. 10, no. 1, 1965, 132-139

TOPIC TAGS: ethylenediamine phosphonic acid derivative, dissociation constant, chelate, alkaline earth chelate, rare earth chelate, instability constant

ABSTRACT: The dissociation constants of di-N-carboxymethylethylenediamine-bis-methylphosphonic acid (I) in 0.1N KCl at 20C were determined potentiometrically (dissociations are shown by the 6 formulae): $K_1 = 1.0 \times 10^{-2}$, $K_2 = 2.1 \times 10^{-3}$, $K_3 = 2.18 \times 10^{-5}$, $K_4 = 7.53 \times 10^{-7}$, $K_5 = 4.63 \times 10^{-9}$, $K_6 = 1.7 \times 10^{-11}$. The instability constants of chelates of I with Ca^{2+} and Sr^{2+} were determined potentiometrically and chromatographically, and of chelates with Ce^{3+} and Y^{3+} . K_H

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ACCESSION NR: AP5002801

was calculated chromatographically. Each of these elements chelated with I in a 1:1 ratio. The chelates of Y^{3+} and Ce^{3+} with I were more stable than with ethylenediaminetetraacetic acid, while the reverse is true for the Ca^{2+} and Sr^{2+} complexes. Orig. art. has 7 figures, 11 tables and 8 equations.

ASSOCIATION: None

SUBMITTED: 22Aug63

ENCL 00

SIR CODE GC, OC

[illegible]

Card 2/2

TIKHONOVA, L.I.

Dissociation constants of di-N-carboxymethylethylenedi-
amino-bis-methyl-phosphinic acid and instability constants
of its chelates with some alkaline earth and rare-earth
elements. Zhur. neorg. khim. 10 no.1:132-139 Ja '65.
(MIRA 18:11)

1. Submitted Aug. 28, 1963.

TIKHONOVA, L.K.; GORYAYEV, M.I.

Esters of cineolic acid. Izv. AN Kazakh. SSR. Ser. khim. no. 2: 79-
82 '59. (MIRA 12:8)

(Cineolic acid)

14.3500

66589

AUTHORS: Favorin, V.N., Kozina, G.S. and Tikhonova, L.K.

SOV/51-7-5-19/21

TITLE: Spectral Characteristics of Electroluminescence of Certain Phosphors Under the Conditions of Simultaneous Action of Direct and Alternating Fields

PERIODICAL: Optika i spektroskopiya, 1959, Vol 7, Nr 5, pp 703-705 (USSR)

ABSTRACT: Two-colour phosphors of ZnS-Cu,Mn type, which emit green and yellow bands in alternating fields, as well as mixtures of 1-colour phosphors, have different electroluminescence spectra in direct and alternating fields. The spectra were obtained using a monochromator UM-2 and a photomultiplier FEU-27. Electroluminescent layers (100 μ thick) were prepared from phosphors mixed with a dielectric (a mixture of melamine-formaldehyde and "resyl" resins or silico-organic lacquers). Transparent tin oxide coatings and a vacuum deposited aluminium layer served as electrodes. The direct or alternating (500 c/s) fields or both of them together were applied to the sample. It was found that in a direct field electroluminescence of a mixture of ZnS-Cu and ZnS-Cu,Mn phosphors has a maximum in the yellow region ($\lambda_{max} = 580 \text{ m}\mu$). Under the action of an alternating field a green band is observed ($\lambda_{max} = 510 \text{ m}\mu$). This is shown in Fig 1 and a similar behaviour of a

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SOV/51-7-5-19/21

Spectral Characteristics of Electroluminescence of Certain Phosphors Under the
Conditions of Simultaneous Action of Direct and Alternating Fields

a two-colour phosphor $ZnS-Cu,Mn$ is shown in Fig 2. In the case of simultaneous action of direct and alternating fields, the colour of electroluminescence depended on the ratio of the two fields (Figs 3 and 4). The analysis of Figs 3 and 4 shows that when the direct and alternating fields are applied together a rise of intensity is observed in the yellow region and the intensity of this yellow emission is higher than the sum of intensities due to the action of direct and alternating fields separately. This non-additivity suggests that, apart from the independent effects of the direct and alternating fields, there is some effect of either of these fields on the luminescence produced by the other field. There are 4 figures and 1 Dutch reference.

SUBMITTED: March 10, 1959

Card 2/2

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TIKHONOVA L.K.
GORAYEV, M.I.; TIKHONOVA, L.K.

Investigation of the volatile oil of *Artemisia porrecta* Krasch.
Vest. AN Kazakh. SSR 11 no.7:77-82 J1 '54. (MIRA 7:11)
(Essences and essential oils) (*Artemisia*)

TIKHONOVA, L. K., Can Chem Sci -- "Study of the chemical composition of ~~the~~ essential oils of *Fuzus* and *elongated* wormwood, ^{and} and certain syntheses based ^{upon} ~~on~~ cineolic acid."

Alma-Ata, 1961. (Kazakh State U im S. M. Kirov) (KL, 8-61, 231)

TIKHONOVA, L.N., assistant; SALIKOV, M.I., dotsent

Methods for cultivating *Clauiceps purpurea*. Sbor.nauch.trud.
Ivan.sel'khoz.inst. no.16:242-246 '58. (MIRA 13:11)

1. Kafedra mikrobiologii Ivanovskogo sel'skokhozyaystvennogo
instituta (for Tikhonova).
(Ascomycetes)

TIKHONOVA, L. N.

USSR/Microbiology - Medical and Veterinary Microbiology

P-4

Abs Jour : Referat Zhurn - Biol. No 16, 25 Aug 1957, 68606

Author : Tikhonova, L.N.

Title : The Study of Antigenic Properties of a Combined
Semiliquid Formol Vaccine Against Calf Paratyphus in
Experiments on Rabbits.

Orig Pub : Sb. Nautsn. Tr. Ivanovsk. x.-kh. in-ta, 1956, No 15,
227-238

Abstract : No abstract.

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- 63

LOSEV, Mikhail Timofeyevich; RYZHENKOV, Ivan Ivanovich; KURILKIN,
Leonid Romanovich; KOLEMASOVA, Irina Maksimovna;
TIKHONOVA, Lyudmila Nikolayevna; LATUKHINA, Ye.I., ved.
red.; POLOSINA, A.S., tekhn. red.

[Labor productivity in petroleum production] Proizvoditel'-
nost' truda v dobyche nefi. Moskva, Gostoptekhizdat,
1963. 152 p. (MIRA 16:10)
(Petroleum production—Labor productivity)

RYZHENKOV, I.I.; LOSEV, M.T.; KOLEMASOVA, I.M.; KURILKIN, L.R.;
TIKHONOVA, L.N.

Basic factors in the growth of labor productivity in petroleum
production of the Soviet Union. Trudy VII no.39:187-199 '63.

(MIRA 17:10)

Effect of the production organization and working conditions
on labor productivity in petroleum production Ibid.:200-213

USSR / Human and Animal Morphology (Normal and Pathological):
Nervous System. Peripheral Nervous System:

S

Abs Jour : Ref Zhur - Biologiya, No 9, 1958, No. 40803

Author : Tikhonova, I. P.

Inst : Smolensk Medical Institute

Title : The Innervation of the Anal Part of the Rectum in
Men and Animals

Orig Pub : Tr. Smolenskogo med. in-ta, 1957, 7, 104-113

Abstract : It was demonstrated on cadavers of 12 men and 12 cats
with the application of the method of Gomort and Bil'-
shovskiy-Gross-Levrent'yev and also in experiments on 26
dogs, that the Auerbach plexus of the rectum (R) has a
large loop structure and contains nervous ganglia of
various forms which in dogs consist mainly of cells of
the first type of Dogel, and in the cat - of cells of the
second type of Dogel. The Meissner plexus of the R

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USSR / Human and Animal Morphology (Normal and Pathological).
Nervous System. Peripneural Nervous System.

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Abstr Jour : Ref Zhur - Biologiya, No 2, 1958, No. 40803

consists of two plexuses - one between the circular musculature and the submucosal membrane, the second in the thickness of the submucosal membrane; the ganglia of the last one consist of cells of the second type of Dogiel. The greatest number of nerve endings is observed in the area of the internal sphincter of the R; part of these belongs to the myelinated, part to the unmyelinated fibers. In the mucous membrane of the anal part of R in men, bush-like nerve endings and encapsulated spindles are found; in the stratified plane epithelium of this part of the rectum - bush-like endings and nonencapsulated spindles.

Card 2/2

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TIKHONOVA, L. P. Cand Med Sci — (diss) "Innervation of the Rectum
and Its Constrictors," Moscow, 1960, 19 pp, 300 copies (Academy of Medical
Sciences USSR) (KL, 47/60, 107)

RYBAKOVA, N.I., kand. med. nauk, ~~TIKHONOVA~~, L.P., kand. med. nauk.

Clinical X-ray course of the metatasis of skeletal tumors into the lungs. Vest. rent. i rad. 39 no.4:15-20 J1-Ag '64. (MIRA 18:7)

1. Rentgenologicheskiy otdel (zav. - prof. I.L.Tager) Instituta eksperimental'noy i klinicheskoy onkologii AMN SSSR, Moskva.

YATSIMIRSKIY, K.B.; TIKHONOVA, L.P.

Cadmium ion catalysis of the alkaline hydrolysis of cysteine ethyl ester. Zhur. neorg. khim. 10 no.9:2070-2074 S '65. (MIRA 18:10)

TIKHONOVA, L.D.

Morphology of the sensory nerve apparatus of the human
rectum during the period of fetal development. *Trudy VNIIG*
114-121 '62

1. Iz kafedry normal'noy anatomii i razv. - prof. L.D. Tikhonova
Smolenskogo gosudarstvennogo meditsinskogo instituta.

TIKHONOVA, L. P.

261T41

USSR/Medicine - Tissue Transplantation Jan/Feb 53

"Histological Changes in Tissues During the Process of Their Preservation at Low Temperatures, Autoclaving, and Transplantation Into an Organism According to the Method of V.P. Filatov," L.P. Stepantsova, L.P. Tikhonova, T.K. Ivanova, Chair of Histology, Smolensk Med Inst

Arkhiv Patol, Vol 15, No 1, pp 50-53

Expts with transplantation of preserved tissue in animals showed preservation of animal tissues 7 days at low temps of 2 or 40 caused no marked change in

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their structure of color. Absorption rate of transplanted tissues depends on their type and the reaction of the host's organism, primarily on the volume of leucocytic infiltration. Further expts are in progress.

TIKHONOVA, L.V., inzhener; VICHEPENIN, A.Ye., inzhener, redaktor; VERINA,
G.P., tekhnicheskii redaktor.

[Advanced methods of manufacturing building materials] Peredovye
metody proizvodstva stroitel'nykh materialov. Moskva, Gos.transp.
shel-dor.izd-vo, 1956.93 p. (MLRA 9:6)
(Building materials industry)

The Researcher L.V.

TIKHONOVA, L.V.

Fertility and speed of development of the cotton aphid (*Aphis gossypii* Glov.) as affected by the temperature. Trudy Inst. zool.
i paras. AN Uz. SSR no.7:77-88 '56. (MIRA 10:11)
(Uzbekistan--Plant lice) (Cotton--Diseases and pests)

TIKHONOVA, L.V.

Making wood chip blocks. Transp. stroi. 9 no.10:6-8 0 '58.
(MIRA 11:11)

1. Nachal'nik Tsentral'noy laboratorii Glavstroyprosa.
(Wood, Compressed)

TEKHONOVA, L. V.

"Nematodes of citrus crops in Uzbekistan and preventive measures to combat their harmful forms." Published by the Acad Sci Uzbek SSR. Min Higher Education USSR. Central Asia State U imeni V. I. Lenin. Tashkent, 1955. (Dissertation for the Degree of Candidate in Biological Science).

SO: Knizhnaya letopis', No. 16, 1956

BODRIKOV, I.M., ed.; GOLOVANOV, A.L., redaktor; BEGICHEV, V.G., inzhener;
BERESLAVSKIY, Ya.M., inzhener; ZAK, G.I., inzhener; SOLOGUB, A.D., inzhener;
TANTSMAN, A.I., inzhener; ~~TIKHONOVA, L.V., inzhener.~~

[Progressive technology in the building materials industry of the Ministry
of Railroad Transportation] Peredovaya tekhnologiya v promyshlennosti
stroitel'nykh materialov MPS. Moskva, Gos. transp. shel-dor. izd-vo, 1952.
62 p. (MLRA 6:5)

(Building materials)

DENISHENKO, A.F., inzh.; RADOCHINSKIY, V.Ya.; inzh.; ~~TIKHONOVA, L.V.~~
inzh.

Non-kilned clay products based on binders made with wastes of
synthetic semiproducts. Suggested by A.F.Denishenko, V.IA.
Radochinskiy, L.V.Tikhonova. Rats.i izobr.predl.v stroi. no.16:
114-115 '60. (MIRA 13:9)

1. Zagorskiy kirpichnyy zavod No.2 Glavmosoblstroyaterialov,
Zagorsk, Moskovskoy oblasti.
(Tiles)

TIKHONOVA, L.Ya.

Materials on microbiological diagnosis of toxoplasmosis in
Tomsk. Trudy TomNIIVS 14:219-223 '63. (MIRA 17:7)

1. Tomskiy nauchno-issledovatel'skiy institut vaktsin i
syvorotok.

TIKHONOVA, L.Ya.

Toxigenic properties of local strains of the diphtheria
bacillus. Trudy Tom NIIVS 12:125-129 '60 (MIRA 16:11)

1. Tomskiy nauchno-issledovatel'skiy institut vaktsin i
syvorotok.

*

TRUKHMANOV, B.G.; TIKHONOVA, L.Ya.

Changes in the anaphylactic and immunological reactions in sensitized guinea pigs under supplementary action of cortisone. Trudy Tom NIIVS 12:170-177 '60 (MIRA 16:11)

1. Tomskiy nauchno-issledovatel'skiy institut vaktsin i syvorotok.

Tikhonova, L. Ya

172 A comparative study of the effect of phytocides of a series
of plants on dysentery bacteria. L. Ya. Tikhonova.
Voprosy Krivoi Patol., Filonitsidov i ~~Protivobaktery-~~
parat., Tomsk 1953, 138-43; Referat. Zhur., Khim. 1954,
No. 48330. E. Wierbicki

TIKHONOVA, M., dvornik (Zagorsk, Moskovskoy obl.); GUROV, T., dvornik (Zagorsk, Moskovskoy obl.); VAS'KINA, A., dvornik (Zagorsk, Moskovskoy obl.); KISELEV, A., dvornik (Zagorsk, Moskovskoy obl.); VASINA, M., dvornik (Zagorsk, Moskovskoy obl.); SHAKALOVA, A., dvornik (Zagorsk, Moskovskoy obl.); TIKHONOVA, P., dvornik (Zagorsk, Moskovskoy obl.); PEROVA, A., dvornik (Zagorsk, Moskovskoy obl.)

An open letter from yard cleaners in Zagorsk. Zhil.-kom. khoz. 13 no.3:
10 Mr '63. (MIR 16:3)

(Cleaning machinery and appliances)

TIKHONOVA, M.A.

42642. K Voprosu O Deystviy Mlekovicheskogo Polya UVCH Na "ost Molodykh Zhivotnykh.
Trudy Uzbek. Gos. Nauch--Issled. In-ta Fizioterapii I Kurortologii Im Smashko, Sb.
10, 1968, S 113-19.

ANIKIN, M.M., Docent, BLUDOVA, P.A., KORENEVA, L.A., TIKHONOVA, M.A., Docent

Hypertension

Local application of short wave diathermy in hypertension. Zhur. nerv. i psikh. 52
no. 9, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified

BLUDOVA, P.A.; KURILOVA, L.M.; TIKHONOVA, M.A.

Effect of short-wave diathermy on the function of the visual analyzer. Zhur.
nevr.i psikh. 53 no.10:790-795 O '53. (MLRA 6:10)

1. Fizioterapevticheskiy kabinet Instituta nevrologii Akademii meditsinskikh
nauk SSSR. 2. Laboratoriya fiziologii i patologii sreniya Instituta nevro-
logii Akademii meditsinskikh nauk SSSR.
(Nervous system) (Electrotherapeutics) (Sight)

L 41335-66 EWT(m)/T/EWP(j) IJP(c) WW/RM

ACC NR: AP6025620

SOURCE CODE: UR/0413/66/000/013/0076/0076

AUTHORS: Kirilovich, V. I.; Shner, S. M.; Rubtsova, I. K.; Rabkina, A. E.;
Tikhonova, M. A.

ORG: none

TITLE: A method for hardening epoxy resins. Class 39, No. 183379 announced by
Scientific Research Institute of Plastics (Nauchno-issledovatel'skiy institut
plasticheskikh mass)

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 76

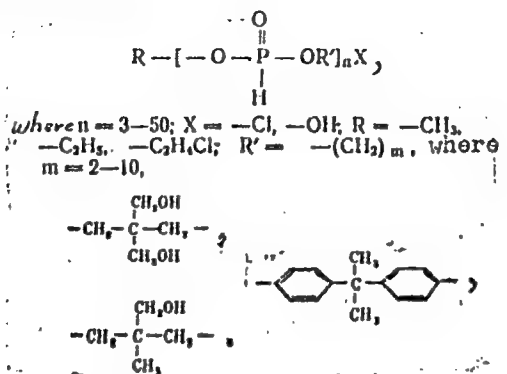
TOPIC TAGS: epoxy plastic, ~~curing agent~~, polyester plastic, fire resistant material,
organic phosphorus compound, ~~resin~~, ~~hardening~~

ABSTRACT: This Author Certificate presents a method for hardening epoxy resins by
phosphorus-containing hardeners. To increase the fire resistance of the polymers,
phosphorus-containing polyesters with a reactive hydrogen atom at the phosphorus atom are
used as hardeners. These polyesters have the general formula,

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UDC: 678.643.028.294:678.85

J. 41335-56
ACC NR: AP6025620



A formula for determining the amount of hardener needed is given. Orig art.
 has: 2 formulas.

[04]

SUB CODE: 11/ SUBM DATE: 08Apr65/ ATD PRESS: 5058

Card 2/2 11b

BURKSER, G.V., prof.; TIKHONOVA, M.B., assistant

Use of silage enriched with carbamide in swine fattening.
Veterinariia 42 no.11:87-89 N '65.

(MIRA 19:1)

1. Kirgizskiy sel'skokhozyystvennyy institut.

TIKHONOVA, Mariya Pavlovna[Tykhonova, M.P.]; VORONINA, Nadezhda
~~Perfir'yevna~~; SMIRNOV, O.V.[Smyrnov, O.V.], red.;
NEMCHENKO, I.Yu., tekhn. red.

[Rabbit raising]Krolivnytstvo, Kyiv, Derzhsil'hospvydav
URSR, 1962. 157 p. (MIRA 15:9)
(Rabbits)

L 38724-66	EWI(m)/ENP(j)/T/ENP(e)	LJP(c)	RM/WIL/DI/WM
ACC NR: AP6014322	(A)	SOURCE CODE: UR/0314/65/000/012/0030/0032	
AUTHOR: <u>Tikhonova, M. S. (Engineer)</u>			
ORG: None			
TITLE: New <u>packing materials</u> based on <u>Teflon</u> with combination <u>fillers</u> for compressors operating without lubricant			
SOURCE: Khimicheskoye i neftyanoye mashinostroyeniye, no. 12, 1965, 30-32			
TOPIC TAGS: sealing device, Teflon, packing material, high pressure compressor, molybdenum disulfide, fiberglass, graphite, <u>FILLER</u> / <u>FGM PACKING MATERIAL</u> , <u>FGSM PACKING MATERIAL</u>			
ABSTRACT: Data are given on the physical, mechanical and chemical properties of two new types of packing materials, designated <u>FGM</u> and <u>FGSM</u> , developed by the All-Union Design Scientific Research Institute of Chemical Machinery, for piston seals in compressors operating without lubrication. The technological process used for the production of each type of material is briefly outlined. The FGM material is based on Teflon with the addition of graphite dust and <u>molybdenum disulfide</u> // <u>O-rings</u> are pressed from this material at a pressure of at least 39.2 MN/m ² with holding for 3-10 min depending on the thickness of the ring. The blanks are then baked and cooled, after which they are turned and milled to the proper dimensions. FGSM material is made from Teflon with the addition of <u>graphite dust</u> , molybdenum disulfide and <u>fiber-</u>			
Card 1/2		UDC: 678.5:621-762:621.51	

L 38734-66

ACC NR: AP6014322

2

glass.¹⁵ The blanks are preformed at a pressure of at least 63.8 MN/m² after which they are baked and machined. Tables are given showing the physical and mechanical properties of the materials as well as their chemical stability and rate of wear.// An analysis of these data shows that the new materials may be used for O-rings in medium- and high-pressure compressors. Orig. art. has: 4 figures, 4 tables.

SUB CODE: 13, 11/ SUBM DATE: none/ ORIG REF: 003/ OTH REF: 004

Card 2/2 *H*

8(5)

10V/ - - -

AUTHORS: Danilov-Pok, V.S., Mintz, M.Z., Syrovatka, V.I., et al.,
M.V.

TITLE: On the Application of Hydrocarbon Fuel to Elements with Solid
Electrolytes (O primeneniі uglevodorodnogo topliva v elementakh
s tverdyimi elektrolitami)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol XXXII, No 4, 649-655
(USSR)

ABSTRACT: The possibility of using fuel elements for feeding radio stations and broadcasting apparatuses in areas without electricity is investigated here. The use of gas generators is not convenient, so liquid fuels, like gasoline, are employed for this purpose. Thermodynamic calculations made by Derlyann, Ref. 1, and others lead to the conclusion that mixtures of hydrocarbons like those in gasoline ensure a theoretical efficiency of about 95-100% at an emf of 1.10-1.15 v if the temperature is 500-1,000°C. The gasoline elements develop an emf and when the circuit is closed produce electric current obtaining electric energy from the electrochemical process of the burning of gasoline. An experiment shows that the optimum temperature is 700-750°C, the emf 0.8-0.9 v, the current density 1.0-1.5 a/cm².

Card 1/2

SCV/SC-32-3-10/73

On the Application of Hydrocarbon Fuel in Elements with Solid Electrolytes

After several hours the electric index of the cell is explained by the reduction of various parts of the cell by gas permeability etc.

There are 5 graphs, 1 set of diagrams, 2 tables, and 14 references, 8 of which are Soviet, 5 German, 3 American, and 1 English.

100 1000: June 25, 1957

Card 2/2

TIKHONOVA, N., kand. biol. nauk.; PODOL'NIY, V., student

~~Biological investigation of the growth and development of plants.~~
Nauka i pered. op. v sel'khoz. 8 no. 7:45- 47 J1 '58. (MIRA 11:8)

1. Moskovskiy ordena Lenina Gosudarstvennyy universitet imeni
M.V.Lomonosova.

(Primroses)
(Tobacco)

TIKHONOVA, N., kand. biolog. nauk; KASHMANOVA, O., mladshiy nauchnyy sotrudnik

Molybdenum against pea and bean diseases. Zashch. rast. ot vred. i bol.
10 no.2:23-24 '65. (MIRA 18:4)

1. Vsesoyuznyy institut kormov.

W TIKHONOVA *M*

1724 Measurements of the Altitude Effect of Electron-Nuclear Showers. L. Kuzmina and N. Tikhonova.
Doklady Akad. Nauk S.S.R. 69, 535-7(1949)(in Russian).

Countings of showers under Pb were made during flights at 8,500 to 10,000 m, with a view to establishing a link between observations, made at lower altitudes and in the stratosphere, on the nature of the component responsible for the generation of those showers. The relationship between the latter and the frequency of extensive atmospheric showers was also measured. In the instrument employed, showers of electromagnetic character were practically excluded, the bulk of observations dealing with showers generated by particles that produce nuclear disintegrations. These particles, producing in lead showers of electrons and nuclei, are absorbed in air exponentially, with $1/\mu = 90 \text{ g cm}^2$; however, a correction for angular distribution would probably increase this to $1/\mu = 100$ to 120 g cm^2 , in accordance with data for all altitudes up to 20 km. The observations confirmed also that one part at least of the particles in question belong to extensive atmospheric showers.

Phys. Inst. in P.N. Lebedev AS USSR

AS-SL METALLURGICAL LITERATURE CLASSIFICATION

BOOK SHEET
SHEET NO. ONE

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PETROV, B.A., professor, predsedatel'; DOROTAEV, V.I., sekretar'; MLYNCHIK, V.E.; KAZANSKIY, V.I., professor; BANILEV, A.N., professor; LEVIT, V.S., professor; PETROVSKIY, B.V., professor; PECHATNIKOVA, E.A.; SOLOV'YEV, A.Ye., professor; MAKHOV, N.I., dotsnet; YELANSKIY, N.N. professor; PLOTKIN, F.M., professor; VISHNEVSKIY, A.A., professor; VETCHINKIN, Yu.M.; GUREVICH, N.I., professor; OSIPOV, B.K., professor; TIKHONOVA, N.A.; RY-ZHIKH, A.N., professor; HUDYAVSKIY, B.A.; TERNOVSKIY, S.D., professor.

Minutes of the session of the Surgical Society of Moscow and Moscow Province of October 10, 1952. Khirurgiia no.4:92-95 Ap '53. (MLRA 6:6)

1. Khirurgicheskoye obshchestvo Moskvy i Moskovskoy Oblast'.
(Esophagus--Surgery) (Esophagus--Cancer) (Rectum--Diseases)

TRUNOVA, L.A.; MOSOLOV, A.N.; TIKHONOVA, N.A.; BATALINA, T.A.; SPIREVA,
A.I.

Morphology of Mycoplasma-type micro-organisms, isolated from
tissue cultures. Izv. SO AN SSSR no.8. Ser. biol.-med. nauk
no.2:148-155 '65. (MIRA 18:9)

1. Novosibirskiy gosudarstvennyy meditsinskiy institut i
Institut tsitologii i genetiki Sibirskogo otdeleniya AN
SSSR, Novosibirsk.

TIKHONOVA, N.A.

← Influence of chlortetracycline on the morphological composition of
the blood. Voen.-med.zhur. no.9:82-83 S '61. (MIRA 15:10)
(AUREOMYCIN) (BLOOD—EXAMINATION)

TIKHONOVA, N.A., kand.med.nauk

Treatment of patients with pleural empyema with chlortetracycline. Khirurgiia 37 no.3:72-75 Mr '61. (MIRA 14:3)

1. Iz kafedry fakul'tetskoy khirurgii (zav. - prof. N.N. Yelanskiy) lechebnogo fakul'teta I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.
(AUREOMYCIN) (EMPYEMA)

BABIYEVSKIY, K.K.; BELIKOV, V.M.; TIKHONOVA, N.A.

Reduction of esters of substituted α -nitroacrylic acids on a skeletal nickel catalyst. Izv. AN SSSR. Ser. khim. no.4:750-751 '65.
(MIRA 18:5)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

KOGAN, I.B.; TIKHONOVA, N.A.

Effect of a constant magnetic field on movements of Paramcium.
(MIRA 18:7)
Biofizika 10 no.2:292-296 '65.

1. Kafedra fiziologii cheloveka i zhivotnykh Rostovskogo-na-Donu
gosudarstvennogo universiteta.

KOVANEV, V.A.; LUKOMSKIY, G.I.; TIKHONOVA, N.A.

Use of ~~neuroplagia~~ in anesthesiology. VestAMN SSSR 16 no.3:77-87
'61. (MIRA 14:7)

(PHENOTHIAZINE) (ANESTHESIOLOGY)

TIKHONOVA, N.A.

Resistance of local winter wheat varieties to leaf rust.
Agrobiologiya no. 1:128-129 Ja-F '61. (MIRA 14:2)

1. Krymskaya gosudarstvennaya sel'skokhozyaystvennaya opytnaya.
(Leaf rust of wheat)

RASSUDOVA, N.S.; TIKHONOVA, N.A.; BUTKUTE, A.A.

Synthesis of yellow and red cadmium lithopones and investigation
of their physical and technical properties. Lakokras.mat.1 ikh
prim. no.5:22-24 '60. (MIRA 13:11)
(Pigments) (Cadmium sulfite)

TIKHONOVA, N. A.: Master Med Sci (diss) -- "The use of chlorotetracycline (biomycin) in certain surgical diseases". Moscow, 1958. 15 pp (First Moscow Order of Lenin Med Inst im I. M. Sechenov), 200 copies (KL, No 8, 1959, 139)

TIKHONOVA, N.A.; GORLENKO, M.V., doktor biol. nauk

Utilization of solar energy in controlling loose smut of winter
barley in the Crimean Province. Dokl. Akad. sel'khoz. 24 no.5:38-40
'59. (MIRA 12:7)

1. Krymskaya gosudarstvennaya sel'skokhozyaystvennaya opytnaya
stantsiya. Predstavlena sektsiyey zashchity rasteniy Vsesoyuznoy
akademii sel'skokhozyaystvennykh nauk im. Lenina.
(Crimea--Barley--Diseases and pests)
(Smuts) (Solar energy)

TIKHONOVA, N.A.

Biomycin treatment in carbuncles and furunculosis. Voen.-med.zhur.
no.7:67-68 J1 '57. (MIRA 11:1)

(FURUNCULOSIS, ther.
chlortetracycline)
(CHLORTETRACYCLINE, ther. use
furunculosis & carbuncles)

VASIL'YEV, P.I.; LEBOVA, R.G.; PODVAL'MAYA, P.L.; ROZOVSKAYA, G.V.;
RYANICHEVA, M.I.; SILINA, O.M.; TITOV, V.I.; ~~TIKHOMOVA, M.~~
SERGEYVA, N.A., redaktor izdatel'stva; GORDIYENKO, Ye.B.,
tekhnicheskiiy redaktor

[Methods in chemical analysis of mineral ores] Metody khimicheskogo
analiza mineral'nogo syr'ia. Moskva, Gos. nauchno-tekhn. izd-vo
lit-ry po geologii i okhrane neдр. No.1. 1955. 77 p. (MLRA 9:7)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy insitut mineral'-
nogo syr'ia.
(Ores--Analysis)

B. BIYEVSKIY, K.K.; BELIKOV, V.M.; TIKHONOVA, N.A.

Amino acids. Report No.1: Synthesis of DL-threonine and
DL- α -aminobutyric acid based on the reactions of nitro-
acetic ester condensation. Izv. AN SSSR Ser. khim. no.1:
89-95 '65. (MIRA 18:2)

1. Institut elementoorganicheskikh soedineniy AN SSSR.

BABIYEVSKIY, K.K.; BELIKOV, V.M.; TIKHONOVA, N.A.

Preparation of α -nitroacrylic ester. Dokl. AN SSSR 160 no.1:
103-105 Ja '65. (MIRA 18:2)

1. Institut elementoorganicheskikh soedineniy AN SSSR. Submitted
July 1, 1964.

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Ca 3

USSR/Human and Animal Physiology. Circulation.

V

Abs Jour: Ref. Zhur-Biol., No 6, 1958, 26837.

Author : ~~N. I. Tikhonova~~

Inst : The Vitebsk State Pedagogical Institute.

Title : The Question of a Sucking Effect of Cardiac Diastole.

Orig Pub: Uch. zap. Vitebskiy gos. ped. in-t, 1956, No 5,
85-88.

Abstract: A cannula with a curved end was introduced into the ventricle of an isolated frog's heart, and it was filled to a set level with Ringer's solution. Fluid could enter the heart and flow out of it only through the cannula. By varying the incline of the cannula so that the fluid level occupied various positions with respect to the heart, the author showed that

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USSR/Human and Animal Physiology. Circulation.

V

Abs Jour: Ref. Zhur-Biol., No 6, 1958, 26837.

the movement and quantity of fluid flowing into the heart depends only upon the position of the cannula. No sucking effect of cardiac diastole was detected.

Card : 2/2

TIKHONOVA, N.A.; KISLYY, A.V., mladshiy nauchnyy sotrudnik

Effective method for controlling granary pests. Zashch. rast.
ot vred. i bol. 4 no.2:26 Mr-Apr '59. (MIRA 16:5)

1. Zaveduyushchiy otdelom zashchity rasteniy Krymskoy oblastnoy
gosudarstvennoy sel'skokhozyaystvennoy opytnoy stantsii (for
Tikhonova).
(Crimea—Granaries—Disinfection)

SERAFTIMOV, L.A.; TIKHONOVA, N.K.; L'VOV, S.V.

Liquid - vapor equilibrium in the acetone - vinyl acetate system at
atmospheric pressure. Zhur.fiz.khim. 38 no.8:2065-2067 Ag '64.
(MIRA 18:1)

L'VOV, S.V.; STARKOV, A.V.; FAL'KOVSKIY, V.B.; TIKHONOVA, N.K.

Dehydrochlorination of dichloroethane in packing-free columns.
Zhur.prikl.khim. 34 no.8:1894-1895 Ag '61. (MIRA 14:8)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni
M.V. Lomonosova.

(Ethane) (Ethylene)

TIKHONOVA, N.M. (Tomsk)

Some histochemical data on the characteristics of intestinal
coli-infection. Arkh. pat. no.11:53-59 '64. (MIRA 18:11)

1. Kafedra patologicheskoy anatomii (zav. -- chlen-korrespondent
AMN SSSR prof. I.V. Toroptsev) Tomskogo meditsinskogo insti-
tuta i kafedra patologicheskoy anatomii (zav. -- chlen-korres-
pondent AMN SSSR prof. A.I. Strukov) I Moskovskogo ordena
Lenina meditsinskogo instituta imeni I.M. Serchenova.

L 36823-66 EWT(1)/EWT(m)/T/EWT(e) IJP(c) WH

ACC NR: AT6020042

(A)

SOURCE CODE: UR/2564/65/005/000/0410/0417

AUTHOR: Doladugina, V. S.; Berezina, Ye. Ye.; Tikhonova, N. P.

48

B+1

ORG: none

TITLE: Some results of the homogeneity study of synthetic corundum crystals by the interferometer method

21

SOURCE: AN SSSR. Institut kristallografii. Rost kristallov, v. 5, 1965, 410-417

TOPIC TAGS: crystal growth, crystal imperfection, optic interference, refractive index, corundum

ABSTRACT: The paper presents results of investigations of the homogeneity of synthetic corundum crystals by means of a Michelson interferometer using a method described earlier (Rost kristallov, v. 5, 1965, p 391). The variation Δn of the index of refraction, measured along and across the growth direction of crystals of varying orientation, diameter, and length, was used as the homogeneity index. An analysis of numerous ruby and leucosapphire interference patterns shows that 1) the corundum crystals of intermediate size do not exhibit any Δn along the growth direction; 2) the quality of crystals grown by the Verneuil method depend on their diameter; 3) in most crystals the index of refraction increases from the center of the crystal toward its boundaries; 4) in ruby crystals with a 90° oriented optical axis, the oriented anastigmatism

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is caused by the presence of block boundaries and slipping traces on the base plane; 5) the Δn in leucosapphire crystals is comparable in magnitude to the one found in ruby; 6) radial nonuniform admixture distribution is the basic cause for the appearance of radial Δn 's; and 7) the thermoelastic stresses and inhomogeneities in lattice structure play a secondary role in the production of Δn 's. Orig. art. has: 1 formula and 7 figures.

SUB CODE: 20/ SUBM DATE: 00/ ORIG REF: 006/ OTH REF: 000

ms
Card 2/2

PASKUDSKIY, Anatoliy Vladislavovich; BOBROVA, Larisa Aleksandrovna;
TIKHONOVA, N.V., red.; BARANOVA, N.N., tekhn. red.

[Organization of a study room and performance of laboratory
work on plastics and synthetic fibers] Organizatsiia ucheb-
nogo kabineta i provedenie laboratornykh rabot po izucheniiu
plasticheskikh mass i sinteticheskogo volokna. Moskva,
Vses. uchebno-pedagog. izd-vo Proftekhizdat, 1961. 40 p.
(MIRA 15:2)

(Chemical laboratories—Equipment and supplies)
(Plastics) (Textile fibers, Synthetic)

GORDIY, Aleksandr Ignat'yevich [Hordii, Oleksandr], zhurnalist;
TIKHONOVA, N.V., red.

[Lands rise from the ocean] Zemli vstaiut' z okeanu. Kyiv,
"Molod'," 1965. 116 p. (MIRA 18:12)

BLAGMAN, Boris Borisovich; TIKHONOVA, N.V., red.; BARANOVA, N.N.,
tekh. red.

[Teaching building trades in school workshops] Obuchenie
uchashchikhsia stroitel'nykh professii v masterskikh uchi-
lishcha. Moskva, Proftekhizdat, 1961. 55 p. (MIRA 15:5)
(Building trades--Study and teaching)

SHVEDOV, Aleksandr Stepanovich; TIKHONOVA, N.V., red.; NESYSSLOVA,
L.M., tekhn. red.

[Tests on the industrial training of lathe and milling
machine operators] Proverochnye raboty po proizvodstven-
nomu obucheniiu tokarei i frezerovshchikov. Moskva, Prof-
tekhnizdat, 1963. 65 p. (MIRA 17:3)

1. Starshiy metodist Leningradskogo gorodskogo uchebno-
metodicheskogo kabineta (for Shvedov).

OSTROVSKIY, Aleksandr Samoylovich; RYAZANTSEV, Georgiy Mikhaylovich;
RASKIN, M.M., nauchn. red.; TIKHONOVA, N.V., red.; TOKER,
A.M., tekhn. red.

[Conducting laboratory work on mensuration, allowances and
fits] Provedenie laboratornykh rabot po tekhnike izmereniia,
dopuskam i posadkam. Moskva, Protekhizdat, 1962. 80 p.
(MIRA 17:4)

BAUSHEV, Nikolay Mikhaylovich; SHAMOV, Boris Pavlovich; MOSOLOV
K.V., nauchn. red.; TIKHONOVA, N.V., red.; BARANOVA,
N.N., tekhn. red.

[Modernization of training-shop equipment] Modernizatsiia
oborudovaniia uchebnykh masterskikh. Moskva, Proftekhizdat,
1963. 52 p. (MIRA 17:1)

SHILYAKOV, Nikolay Ivanovich; ALFIMOVA, I.A., nauchnyy red.; TIKHONOVA,
N.V., red.; BARANOVA, N.N., tekhn. red.

[Laboratory work on lathes]Laboratornye raboty po tokarnomu delu.
Moskva, Proftekhizdat, 1962. 127 p. (MIRA 16:3)
(Turning)

VOLKOV, Leonid Pavlovich; TIKHONOVA, N.V., red.; BARANOVA, N.N.,
tekhn. red.

[Using motion pictures in studying the fundamentals of
technical mechanics]Primenenie kinofil'mov pri izuchenii
osnov tekhnicheskoi mekhaniki. Moskva, Profizdat, 1962. 37 p.
(MIRA 15:10)

1. Prepodavatel' remeslennogo uchilishcha no.29 Moskvy (for
Volkov).

(Motion pictures in education)
(Mechanics—Study and teaching)

NIKOLAYENKO, Ivan Ivanovich [Nikolaienko, I.I.]; TIKHONOVA, N.V., red.;
KLOKOVA, S.M., tekhn. red.

[Visible features of communism] Zrymi rysy komunizmu. Kyiv, Vyd-vo
TsK LKSMU "Molod'", 1961. 94 p. (MIRA 14:9)
(Efficiency, Industrial) (Communist ethics)

KONDRATENKO, Igor' Vasil'yevich; SHTOKMAN, Yevgeniy Aleksandrovich; TIKHONOVA, N.V., red.; PEREDERIY, S.P., tekhn. red.

[Training models in construction, sanitary engineering, and building machinery] Uchebnye modeli po stroitel'stvu, sanitarnoi tekhnike i stroitel'nyim mashinam. Moskva, Vses. uchebno-pedagog. izd-vo Prof-tekhizdat, 1961. 164 p. (MIRA 14:8)

(Engineering—Study and teaching) (Engineering models)

TIKHONOVA, N.V.

Activity of the Scientific and Technical Association for the
Shipbuilding Industry. Sudostroenie 24 no.2:74 P '58. (MIRA 11:3)
(Shipbuilding)

NESHUMOV, B.V., kand.iskusstvoved.nauk; KOSHELEV, A.Ye., arkhitekt; ASTROVA, T.Ye., arkhitekt; SHIKHEYEV, V.N., arkhitekt; VOSHCHANOVA, G.K., arkhitekt; GORBUNOVA, V.A., arkhitekt; KOVAL'KOV, V.G., arkhitekt; MARKEYEV, Yu.S., arkhitekt; YAVOROVSKAYA, M.E., arkhitekt; OGYZKO, P.V., arkhitekt; ~~TIKHONOVA, N.V., arkhitekt~~; MANANNIKOVA, L.V., arkhitekt; GRADOV, G.A., red.; PAVLENKO, M.V., red.

[Furniture and equipment for public buildings; catalog based on materials from the Exhibition of Furniture and Equipment for Public Buildings, 1959-1960] Mebel' i oborudovanie dlia obshchestvennykh zdani; katalog sostavlenn po materialam vystavki mebeli i oborudovaniia dlia obshchestvennykh zdani, 1959-1960 gg. Moskva, Gos.izd-vo lit-ry po stroit., arkhitekt. i stroit.materialam, 1960. 186 plates. (MIRA 14:2)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut obshchestvennykh zdaniy i sooruzheniy. 2. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR (for GrADOV). (Furniture--Catalogs) (Public buildings--Equipment and supplies)

TIKHONOVA, N. Y.

Activity of the Central Administration of the Shipbuilding
Industry's Scientific and Technical Division and its sections.
Sudostroenie 23 no.8:71 Ag '57. (MIRA 10:11)
(Shipbuilding)

Category : USSR/Acoustics - Ultrasound

J-4

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 4734

Author : Mikhaylov, G.D., Tikhonova, N.V., Yadrova, I.M.

Inst : Moscow Oblast' Pedagogical Institute, Moscow, USSR

Title : Simultaneous Excitation of Quartz Radiator at Several Frequencies.

Orig Pub : Akust. zh., 1956, 2, No 2, 23.

Abstract : Description of a method for exciting a quartz radiator at several frequencies. The radiator is fed by several oscillators. For this purpose one electrode of the radiator is made the common (zero) terminal for the oscillators, and the second electrode is divided into sectors, insulated from each other. The power from a corresponding oscillator is connected to each sector. Experimental verification of this method was carried out with the aid of a plate 20 mm in diameter and 3 mm thick, which was excited at 1 mc. One electrode was common, and the other consisted of two equal semicircles separated by a gap of 1 mm and fed from two oscillators. It was observed that the entire surface of the plate radiates waves when voltage is applied either to one sector or to both sectors. When voltage is applied to one

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Category : USSR/Acoustics' - Ultrasound

J-4

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 4734

only, the intensity of the waves becomes weaker. The experiments were carried out in liquid.

Card : 2/2

IVANOV, Valeriy Vladimirovich; OVCHINNIKOV, Aleksandr Mikhaylovich;
YAROTSKIY, Leonid Aleksandrovich: Prinimaya uchastiye TIKHONOVA,
N.V. NEVRAYEV, G.A., red.; IVANOVA, A.G., tekhn.red.

[Map of underground mineral waters of the U.S.S.R. with a scale
of 1:7,500,000; explanatory notes] Karta podzemnykh mineral'nykh
vod SSSR masshtaba 1:7,500,000; poiasnitel'naya zapiska. Moskva,
Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane neдр, 1960.
59 p. (MIRA 13:12)

1. Gidrogeologicheskoye otdeleniye Gosudarstvennogo nauchno-issle-
dovatel'skogo instituta kurortologii i fizioterapii Ministerstva
zdravookhraneniya SSSR (for Ivanov, Ovchinnikov, Yarotskiy).
(Mineral waters--Maps)

SOROKIN, Nikolay Yakovlevich; ALFIMOVA, I.A., nauchn. red.;
TIKHONOVA, N.V., red.; DORODKOVA, L.A., tekhn. red.

[Teaching special turning technology in a school] Prepoda-
vanie spetsial'noi tekhnologii tokarnogo dela v uchilishche.
Moskva. Proftekhizdat, 1962. 61 v. (MIRA 16:12)

1. Prepodavatel' tekhnicheskogo uchilishcha No.14 Leningrada
(for Sorokin).

(Turning--Study and teaching)

ANTONENKO, Leonid Sergeyevich; TIKHONOVA, N.V., red.; NESMYSLOVA, L.M.,
tekhn. red.

[Laboratory testing of building materials] Laboratornye raboty po
ispytaniyu stroitel'nykh materialov, Moskva, Vses. uchebno-pedagog.
izd-vo, Proftekhizdat, 1961. 58 p. (MIRA 14:12)
(Building materials--Testing)

TREYMAN, Artur Ivanovich; TSEGEL'SKIY, Yu.V., nauchnyy red.;
TIKHONOVA, N.V., red.; BARANOVA, N.N., tekhn. red.

[Laboratory work on relay protection and automatic control]
Provedenie laboratornykh rabot po releinoi zashchite i av-
tomatike . Moskva, Proftekhizdat, 1963. 113 p. (MIRA 16:8)
(Electric protection) (Automatic control)

SHUMOVICH, Mikhail Khanan'yevich; TIKHONOVA, N.Y., red.; BARANOVA,
N.N., tekhn. red.

[Conducting laboratory work on the fundamentals of applied
mechanic] Provedenie laboratornykh rabot po osnovam tekhnicheskoi mekhaniki. Moskva, Proftekhizdat, 1962. 62 p.
(MIRA 16:7)

1. Prepodavatel' remeslennogo uchilishcha No.47 Moskvy (for
Shumovich).

(Mechanics--Problems, exercises, etc.)

TIKHONOVA, N.V., inzh.

Effect, based on studies performed on models made of equivalent materials, of stoping operations on the occurrence of rock pressure in mining flat seams by means of longwalls and chambers with timbering. Sbor. DonUGI no.29:173-186 '63. (MIRA 16:10)

(Geological modeling) (Rock pressure)
(Mining engineering)

DMITROV, Serafim Aleksandrovich, zasl. uchitel' proftekhobrazovaniya RSFSR; TIKHONOVA, N.V., red.

[Training of electricians in the field of control and measuring instruments and automatic control] Podgotovka elektroslesarei po kontrol'no-izmeritel'nym priboram i avtomatike. Moskva, Vysshaya shkola, 1964. 73 p.
(MIRA 18:3)

1. Zamestitel' direktora professional'no-tekhnicheskogo uchilishcha No.46 Nizhnego Tagila (for Dmitrov).

TODRIN, Genrikh Zalmanovich; KOZLOVA, Yevdokiya Lazarevna;
MOROZOV, Leonid Tikhonovich [deceased]; TIKHONOVA,
N.V., red.

[Industrial training of milling machine operators] Proiz-
vodstvennoe obucheniye frazerovshchikov. Moskva, Vysshaya
shkola, 1965. 73 p. (MIRA 18.6)

TIKHONOVA, O.I., inzh.

The operating life of diesel engines should be substantially
increased. Energomashinostroenie 10 no.6:42-43 Jo '64.
(MIRA 17:7)

TIKHONOVA, O.I., inzh.

Operational characteristics of diesel locomotive engines. Zhel.
dor.transp. 41 no.6:45-46 Je '59. (MIRA 12:9)
(Diesel locomotives)

S/114/60/000/012/006/009
E194/E484

AUTHOR: Tikhonova, O.I., Engineer

TITLE: The Struggle Against Corrosion in Diesel Engines

PERIODICAL: Energomashinostroyeniye, 1960, No.12, p.45

TEXT: An All-Union Conference to consider problems of struggle against corrosion in internal combustion engines and gas turbines was called by the All-Union Council of Scientific Technical Societies, the State Scientific Technical Committee of the USSR, the Scientific Technical Society of the Oil and Gas Industries and others together with the Kuybyshev Sovnarkhoz on March 22-25, 1960 in Novokuybyshev. The results of operating diesel engines on sulphurous fuel were described by representatives of the Central Scientific Research Diesel Institute, the Kolomna Locomotive Construction Works imeni Kuybyshev, The "Dvigatel' Revolyutsii," Works and others. Dotsent Genb, Candidate of Technical Sciences Yavorskiy, Engineer Druzdal'skiy and others described the results of work on the study of the mechanism of action of sulphur in fuels on diesel engines. Sukhanov of GOSPLAN USSR, Malyavinskiy of the Scientific Research Institute of the Petroleum Industry, Gerasimov of the Kuybyshev Oil Refinery and Professor Losikov

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E194/E484

The Struggle Against Corrosion in Diesel Engines

described the use of ammonia to neutralize the harmful influence of sulphur on diesel engines. The Conference decided that when using additive type oil in the majority of diesels, it is permissible to use fuel with sulphur content up to 1% in summer grades and up to 6% in winter grades. Slow speed diesel engines can use fuel of sulphur content up to 1.5% when using additive of the All-Union Scientific Research Institute of the Petroleum Industry No.101. However, existing fuel and lubricant additives are not sufficiently effective for use in more highly rated diesel engines. Accordingly, it will be necessary either to remove the sulphur from the fuel or to develop better fuel and lubricant additives. On comparison with foreign additive type oils in diesel engines running on sulphurous fuel, Soviet lubricating oils, even of the additive type, were found to be inferior. Accordingly, improved additives should be developed. The existing technical requirements in respect of sulphurous fuel are not strict enough to satisfy the engine builders, particularly in respect of mercaptan content. Fuel classification does not allow for the more highly

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S/114/60/000/012/006/009
E194/E484

The Struggle Against Corrosion in Diesel Engines

rated diesel engines. At the present time, hardly anything is being done to calculate the economic effectiveness of various methods of preventing corrosion in engines. Accordingly, it is not clear whether it is more in the interest of the national economy to use more expensive fuel from which the sulphur had been removed, so increasing the life of the engines, or cheap fuel with sulphur in it which might shorten the life of the engine. ✓

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